

LETTER TO THE EDITOR

Post-Treatment Follow-Up of Screen-Detected Breast Cancer Patients: A National Survey from Italy

To the Editor:

Follow-up (FU) practices after primary treatment of breast cancer vary to a great extent and are often non-standard. On the one hand, different schedules are suggested by guidelines for the performance of mammography and physical examination (1–3), and a variety of practical protocols are in common use (4). On the other hand, laboratory and instrumental tests for the detection of distant recurrences are widely used despite the lack of any good evidence of their effectiveness (5).

In 2015, the Italian Group for Mammography Screening (GISMa), the scientific society that gathers the professionals involved in mammography screening programs in Italy, has carried out a questionnaire survey of the patterns of FU of breast cancer patients detected by screening. The reason for this restriction is that screening programs have direct responsibility over these women. The unit of investigation was the local screening program. Since Italian health services, including mammography screening, are delivered on a healthcare district basis, the questionnaire was composed of 11 items relating to the presence and major characteristics of the FU service at the healthcare district level. The questions were simple and unambiguous. An active FU service was defined as using an active personal invitation strategy for eligible patients. Minimal and intensive FU were defined as including mammography and physical examination and, respectively, one or more among tumor markers, chest radiography, liver ultrasound, bone scan, computed tomography scan, and positron emission tomography. The questionnaire was saved as a Microsoft Excel file with locked cells and was sent via e-mail to all screening centers known to the GISMa. Replies were received from 70 local screening programs, equivalent to 62% of the 113 active programs currently

known to the Italian National Center for Screening Monitoring. Data were analyzed descriptively.

Table 1 shows that only 46, or two-thirds, of programs provide a FU service, and that only 56% provide an active service. In most programs with FU service, there is a specially appointed multi-disciplinary team with all relevant expertise areas represented. The greater part of FU teams are not directed by a radiologist. Primary care physicians are assigned no role in two-thirds of programs. Also noteworthy, most multi-disciplinary teams are not supported by a common platform for data collection and integration. Table 2 shows the high degree of variation in FU protocols, with similar numbers of programs following the three possible approaches. Minimal FU protocols are generally based on combined mammography and physical examination. Intensive protocols are used in more than 60% FU services. A little less than half of intensive protocols include tumor markers, chest radiography, liver ultrasound, bone scan, computed tomography scan, and positron emission tomography. The last three questions addressed whether, and when, breast cancer survivors are returned to normal screening. Again, a striking variation was observed. In 48% programs with FU service, their exclusion is permanent. In the remaining ones, patients are returned to normal screening, although this occurs only for a part of them in 9% programs. When women are returned to screening, the duration of FU is 10 years in 75% FU services.

Bearing in mind that programs with efficient and appropriate FU practices are likely to be overrepresented in the sample due to selection bias, the following points need to be stressed. First, at least half of screen-detected breast cancer patients in Italy are not assisted by an active FU service, which puts them at risk of not undergoing their checks regularly. Second, screening radiologists have a secondary role in multi-disciplinary teams, which could predict an insufficient consideration for the value of mammography in surveillance protocols. Studies from other countries have noted that mammography rates decrease rapidly

Address correspondence and reprint requests to: Lauro Bucchi, Romagna Cancer Institute (IRST) IRCCS, 47014 Meldola, Forlì, Italy, or e-mail: lauro.bucchi@irst.emr.it

DOI: 10.1111/tbj.12745

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The Breast Journal, Volume 23 Number 3, 2017 370–372

Table 1. Presence and Organizational Characteristics of Post-Treatment Follow-Up Services for Screen-Detected Breast Cancer Patients in Italian Screening Programs (n = 70)

Screening programs	n (%)
Without follow-up service	24 (34)
With follow-up service	
With active service	39 (56)
With self-referral service	7 (10)
All programs with follow-up service (n = 46)	
With an appointed multi-disciplinary team	41 (89)
With a team including a radiotherapist*	31 (67)
With a team chaired by a radiologist	10 (22)
With a role for primary care physicians	16 (35)
With a common computer platform	12 (26)

*In all programs, the basic composition of the multi-disciplinary team include: radiologist, surgeon, oncologist, and pathologist.

Table 2. Protocols of Post-Treatment Follow-Up for Screen-Detected Breast Cancer Patients in Italian Screening Programs (n = 46)

Protocols	n (%)
Minimal	15 (33)
Intensive	10 (22)
Both	18 (39)
Not reported	3 (6)
All minimal protocols (n = 33)	
MG	2 (6)
Physical examination	1 (3)
MG and physical examination	29 (88)
Not reported	1 (3)
All intensive protocols (n = 28)	
Tumor markers*	3 (11)
Tumor markers and chest radiography	1 (4)
Tumor markers and liver US	1 (4)
Tumor markers, chest radiography, and liver US	8 (29)
Tumor markers, chest radiography, liver US, and bone scan and/or CT scan and/or PET	12 (43)
Not reported	3 (11)

*Including intensive protocol not otherwise specified.
MG, mammography; US, ultrasound; CT, computed tomography; PET, positron emission tomography.

during FU (6). Third, primary care physicians are not represented in FU teams in the large majority of programs, although they could have many functions in the surveillance strategy. Fourth, the majority of FU services use intensive protocols, that have been demonstrated to be ineffective in reducing mortality (5) and are not recommended by any of the most accredited national (7) and international guidelines (3). Fifth, screen-detected breast cancer patients are permanently excluded from half of Italian screening programs. This policy, that creates a disparity across the country, is increasingly criticized (8). Particularly in those healthcare districts where FU is not actively

offered, invitation to the local screening program would act as a fail-safe mechanism to prevent discontinuation of mammography FU.

The results of the survey call for a multi-disciplinary effort to improve the level of organization and appropriateness of FU for breast cancer patients in Italy.

Doralba Morrone, MD*
Gianni Saguatti, MD†
Eva Benelli, PhD‡
Chiara Fedato, PhD§
Alfonso Frigerio, MD¶
Vania Galli, PhD**
Livia Giordano, MD¶
Paola Golinelli, PhD**
Carlo Naldoni, MD††
Adriana Paduos, MD¶
Fiammetta Querci, MD‡‡
Antonio Rizzo, MD§§
Lauro Bucchi, MD¶¶

*Cancer Research and Prevention Institute
Florence
Italy;

†Local Health Authority
Bologna
Italy;

‡Zadig Scientific Communication Agency
Rome
Italy;

§Veneto Region
Venice
Italy;

¶Center for Cancer Prevention
Turin
Italy;

**Local Health Authority
Modena
Italy;

††Emilia-Romagna Region
Bologna
Italy;

‡‡Local Health Authority
Sassari
Italy;

§§Local Health Authority
Asolo
Italy;

and ¶¶Romagna Cancer Institute (IRST) IRCCS
Meldola
Italy

REFERENCES

1. Grunfeld E, Dhesy-Thind S, Levine M. Clinical practice guidelines for the care and treatment of breast cancer: follow-up after treatment for breast cancer (summary of the 2005 update). *CMAJ* 2005;172:1319–20.
2. National Collaborating Centre for Cancer (UK). *Early and Locally Advanced Breast Cancer: Diagnosis and Treatment*. NICE Clinical Guidelines no. 80. Cardiff: National Collaborating Centre for Cancer (UK), 2009.
3. Khatcheressian JL, Hurley P, Bantug E, *et al*. Breast cancer follow-up and management after primary treatment: American Society of Clinical Oncology clinical practice guideline update. *J Clin Oncol* 2013;31:961–5.
4. Greenwood-Haigh L. Mammographic surveillance in the follow up of early primary breast cancer in England: a cross-sectional survey. *Radiography* 2009;15:220–7.
5. Rojas MP, Telaro E, Russo A, *et al*. Follow-up strategies for women treated for early breast cancer. *Cochrane Database Syst Rev* 2005;1:CD001768.
6. Khan NF, Carpenter L, Watson E, Rose PW. Cancer screening and preventative care among long-term cancer survivors in the United Kingdom. *Br J Cancer* 2010;102:1085–90.
7. Associazione Italiana di Oncologia Medica. *Linee guida AIOM*. Available at: <http://www.aiom.it/area+pubblica/area+medica/prodotti+scientifici/linee+guida/1,333,1> (accessed November 28, 2016).
8. Bucci L. Should breast cancer survivors be excluded from, or invited to, organised mammography screening programmes? *BMC Health Serv Res* 2011;11:249.